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(71) Applicant (for all designated States except US): ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE [KR/KR]; 161, Gajeong-dong, Yusong-gu, Daejeon-city 305-350 (KR).

(72) Inventors; and  
(75) Inventors/Applicants (for US only): JEON, Yong-Sung [KR/KR]; 112-1005 Hwangsiltown Apt., 302, Wolpyung-dong, Seo-gu, Daejeon-city 302-280 (KR). PARK, Ji-Man [KR/KR]; 310-1208 Cheongsol Apt.,

Songgang-dong, Yusong-gu, Daejeon-city 305-752 (KR). PARK, Young-Soo [KR/KR]; 101-907 Sanho Apt., Tansang-dong, Seo-gu, Daejeon-city 302-766 (KR). JUN, Sung-Ik [KR/KR]; 107-704 Hanbit Apt., Eoeun-dong, Yusong-gu, Daejeon-city 305-755 (KR). CHUNG, Kyo-II [KR/KR]; 107-1102 Hanwool Apt., Shinsung-dong, Yusong-gu, Daejeon-city 305-707 (KR).

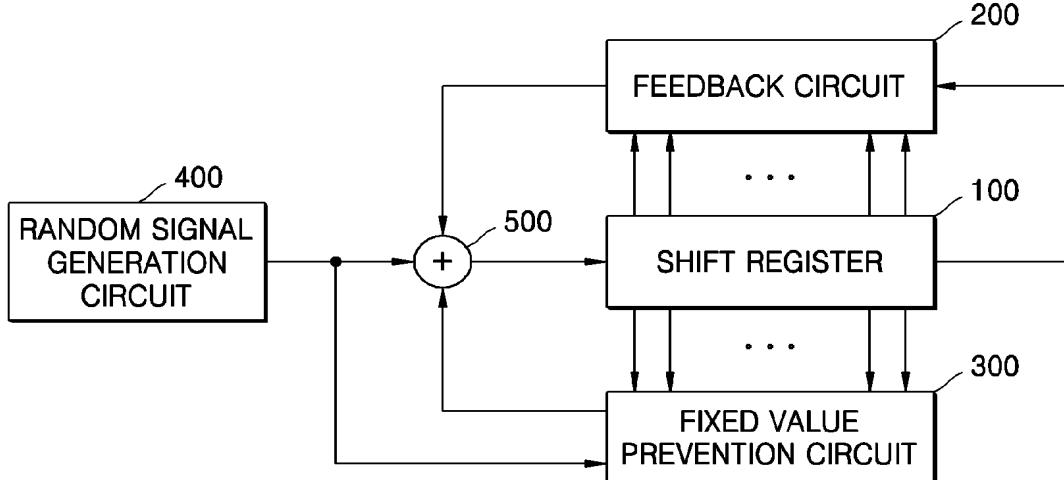
(74) Agent: LEE, Young-Pil; The Cheonghwa Building, 1571-18 Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

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(54) Title: APPARATUS AND METHOD FOR GENERATING RANDOM NUMBER USING DIGITAL LOGIC



(57) **Abstract:** An apparatus and method for generating random numbers using digital logic are provided. The apparatus includes a shift register which sequentially moves bit values stored therein, a feedback circuit which performs a predetermined logic operation on the bit values stored in the shift register to generate a feedback signal, an external signal generation circuit which generates an external signal input to the shift register, and an input logic circuit which performs a predetermined logic operation on the feedback signal and the external signal and inputs a result of operation to the shift register. The method includes sequentially moving bit values stored in a shift register, (b) performing a predetermined logic operation on the bit values stored in the shift register to generate a feedback signal, (c) generating an external signal input to the shift register, and (d) performing a predetermined operation on the feedback signal and the external signal and inputting a result of the operation to the shift register.

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